

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Previously presented) In an optical access network, a method for the communication of services between a central office and customer premises, comprising:

transmitting services from said central office to said customer premises through a passive all-optical downstream path having a first termination at said central office and a second termination at said customer premises; and

receiving services from said customer premises at said central office from an active optical upstream path having a first termination at said customer premises and a second termination at said central office.

2. (Canceled)

3. (Previously presented) The method of claim 1, wherein said passive all-optical downstream path comprises a means for splitting optical signals.

4. (Original) The method of claim 3, wherein said means for splitting optical signals comprises an optical power splitter.

5. (Canceled)

6. (Previously presented) The method of claim 1, wherein said active optical upstream path comprises:

at least one receiver for receiving services from said customer premises intended for upstream transmission; and

at least one switch for aggregating and multiplexing upstream traffic.

7. (Previously presented) The method of claim 6, wherein said active optical upstream path further comprises:

at least one transmitter for transmitting aggregated services upstream.

8. (Previously presented) An apparatus for the communication of services between a central office and customer premises in an optical access network, comprising:

a splitter disposed in a passive all-optical downstream path, for splitting downstream services transmitted from said central office through said passive all-optical downstream path;

at least one receiver disposed in an active optical upstream path, for receiving services from said customer premises from said active optical upstream path; and

at least one switch disposed in said active optical upstream path for aggregating and multiplexing upstream traffic;

wherein said passive all-optical downstream path has a first termination at said central office and a second termination at said customer premises;

wherein said active optical upstream path has a first termination at said customer premises and a second termination at said central office.

9. (Previously presented) The apparatus of claim 8, further comprising:

at least one transmitter for transmitting aggregated services upstream.

10. (Canceled)

11. (Previously presented) The apparatus of claim 8, wherein said passive all-optical downstream path further comprises a repeater.

12. (Canceled)

13. (Previously presented) The apparatus of claim 8, wherein said active optical upstream path further comprises a transmitter.

14. (Original) The apparatus of claim 8, wherein said splitter comprises a power splitter.

15. (Original) The apparatus of claim 8, wherein said apparatus is located within a central office of an access network configured for point-to-point communication.

16. (Previously presented) An apparatus for the communication of services between a central office and customer premises in an optical access network, comprising:

a means for splitting downstream services transmitted from said central office through a passive all-optical downstream path;

at least one means for receiving services from said customer premises from an active optical upstream path; and

at least one means for aggregating and multiplexing upstream traffic in said active optical upstream path;

wherein said passive all-optical downstream path has a first termination at said central office and a second termination at said customer premises;

wherein said active optical upstream path has a first termination at said customer premises and a second termination at said central office.

17. (Previously presented) The apparatus of claim 16, further comprising:

at least one means for transmitting aggregated services upstream.

18. (Previously presented) A passive/active optical access network for the communication of services between a central office and customer premises, comprising:

a central office;

at least one customer premise; and

an active/passive access unit for providing communication between said central office and said at least one customer premise, wherein said passive/active access network is adapted to:

transmit services from said central office to said customer premises through a passive all-optical downstream path, wherein said passive all-optical downstream path

has a first termination at said central office and a second termination at said customer premises; and

receive services from said customer premises at said central office from said active optical upstream path, wherein said active optical upstream path has a first termination at said customer premises and a second termination at said central office.

19. (Previously presented) The passive/active optical access network of claim 18, wherein said passive all-optical downstream path of said active/passive access unit comprises a means for splitting services from said central office.

20. (Previously presented) The passive/active optical access network of claim 18, wherein said active optical upstream link of said active/passive access unit comprises:

- at least one means for receiving services from said at least one customer premise;
- at least one means for aggregating and multiplexing upstream traffic; and
- at least one means for transmitting aggregated services upstream to said central office.